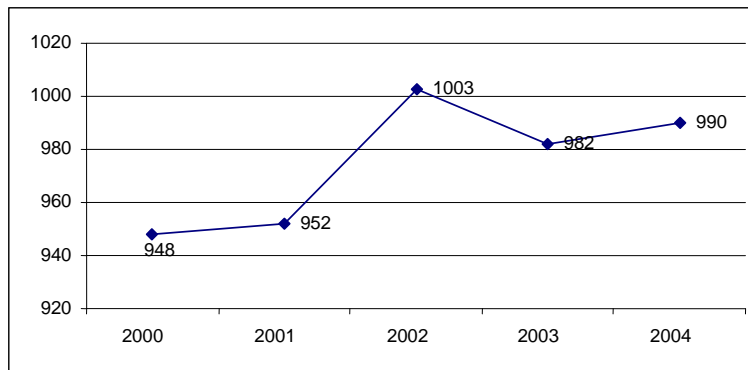


Car Seats, Booster Seats and Seat Belts

Key Facts: Child safety seats and safety belts, when installed and used properly, can prevent injuries and save lives. Each year, an estimated 975 child occupants under 14 years of age die as a result of a motor vehicle incident.¹ Young children restrained in child safety seats have an 80 percent lower risk of fatal injury than those who are unrestrained.²

Motor Vehicle Traffic Occupant Deaths, Ages 0 to 14, United States³



- In 2005, more than 1,400 child occupants died in motor vehicle crashes and nearly half were unrestrained.⁴
- More than 203,000 occupants under 14 years of age were injured in motor vehicle crashes in 2005.⁵
- From 1993 to 2002, there were 159 reported fatal injuries to children less than 12 years of age associated with airbag deployment. Of the total child fatalities 69.2 percent were unrestrained and 29.6 percent were improperly restrained.⁶
- For children ages 0 to 8, restraint use has increased from 15 percent in 1999 to 73 percent in 2005.⁷
- Children are more likely to be properly restrained when the driver is properly restrained.⁸
- In a study observing the misuse of 3,442 child restraint systems (CRS) in six states, approximately 73 percent of CRSs showed at least one critical misuse.⁹
 - 84 percent of CRSs showed critical misuses. Booster seat misuse was 41 percent.
- The most common form of misuses for all CRSs included loose vehicle seat belt attachment to the CRS and loose harness straps securing the child to the CRSs.¹⁰

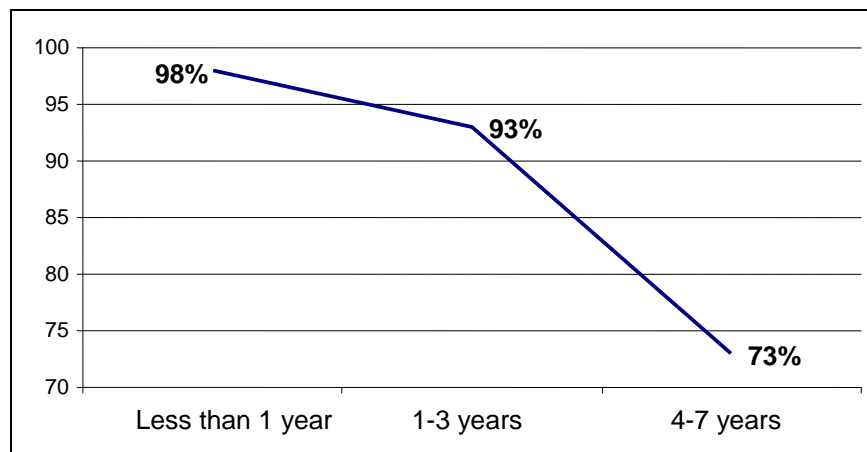
Who is at Risk

- African American children ages 4-7 have the lowest restraint use among children ages 4 to 7, an estimated 26 percent are not restrained while riding in a motor vehicle. Asian children have the highest restraint use, followed by white and Hispanic children.¹¹
- Children 2 to 5 years of age using safety belts prematurely are four times more likely to suffer a serious head injury in a crash than those restrained in child safety seats or booster seats.¹²

Child Restraint System Effectiveness

- Child safety seats reduce fatal injury in passenger cars by 71 percent for infants less than 1 year old and by 54 percent for toddlers 1 to 4 years of age.¹³ For children 4 to 7 years of age, booster seats have shown to reduce injury risk by 59 percent compared to safety belts alone.¹⁴
- Among children under 5 years of age, 451 lives were saved in 2004 due to child restraint use. Of these 451 lives saved, the use of child safety seats was responsible for 413 saved lives and the use of safety belts saved 38 lives.¹⁵
- An estimated 1,700 children's lives were saved between 1996 and 2002 solely because they were seated in a back seat.¹⁶

Percentage of children using safety restraints, by age, 2004¹⁷



Safety Interventions

- Ensure that every occupant is properly restrained for every ride.
- Always follow manufacturer's instructions. Infants should ride in rear-facing child safety seats as long as possible (a minimum of 12 months old and 20 pounds).
- Correctly secure children that weigh between 20 and 40 pounds in a forward facing child safety seat. Always use the safety seat tether for optimal protection.

- Correctly secure children over 40 pounds in a booster seat or other appropriate child restraint until the adult lap and shoulder safety belts fit correctly (approximately 4'9" and 80-100 pounds, usually between 8 and 12 years).
- Return the product registration card provided for all new child safety seats to the manufacturer to ensure you will be notified of any recalls.
- Check www.recalls.gov to inquire about any recalls or safety notices on child safety seats. Avoid purchasing safety seats from yard sales, flea markets and second hand stores or when there is no known history of the seat.

Laws and Regulations

- All 50 states and the District of Columbia have child restraint laws. In 38 states and the District of Columbia all children younger than 16 are covered by either safety belt laws or child restraint laws.¹⁸
- As of November 2006, 38 states and the district of Columbia had upgraded their child restraint laws to require the use of booster seats or other appropriate child restraint device by children up to as old as 9.¹⁹
- Belt use laws in 25 states and the District of Columbia are standard, or primary, meaning police may stop vehicles solely for belt law violations.²⁰

Suggested Citation: Safe Kids Worldwide (SKW). Car Seats, Booster Seats and Seat Belt Safety. Washington (DC): SKW, 2007.

¹ National Center for Health Statistics. Centers for Disease Control and Prevention. National Vital Statistics System. 2000 to 2004 mortality data. Hyattsville (MD): National Center for Health Statistics, 2007.

² Insurance Institute for Highway Safety, *Status Report* 32, no. 9 (Nov. 29, 1997).

³ National Center for Health Statistics. Centers for Disease Control and Prevention. National Vital Statistics System. 2000 to 2004 mortality data. Hyattsville (MD): National Center for Health Statistics, 2007.

⁴ National Highway Traffic Safety Administration National Center for Statistics & Analysis, *Traffic Safety Facts 2005: Children* (2005).

⁵ National Highway Traffic Safety Administration National Center for Statistics & Analysis, *Traffic Safety Facts 2005: Children* (2005).

⁶ Alfredo Quinones-Hinojosa, MD, Peter Jun, MD, Geoffrey T. Manley, MD, PhD, Margaret M. Knudson, MD, and Nalin Gupta, MD, PhD. Airbag deployment and improperly restrained children: A lethal combination. *The Journal of TRAUMA Injury, Infection, and Critical Care*. 2005. Vol. 59, pp. 729–733.

⁷ *Partners for Child Passenger Safety Fact and Trend Report* (October 2006).

⁸ Cody BE, Mickalide AD, Paul HP, Colella JM. Child passengers at risk in America: A national study of restraint use. Washington (DC): National SAFE KIDS Campaign, 2002 February.

⁹ Decina L.E., Lococo K.H. Child restraint system use and misuse in six states. *Accident Analysis and Prevention*. Vol. 37 (2005) pp. 583–590.

¹⁰ Decina L.E., Lococo K.H. Child restraint system use and misuse in six states. *Accident Analysis and Prevention*. Vol. 37 (2005) pp. 583–590.

¹¹ IBID

¹² “The Danger of Premature Graduation to Safety Belts for Young Children,” *Pediatrics*, June 2000

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¹⁵ National Highway Traffic Safety Administration. National Center for Statistics & Analysis. Traffic safety facts 2004: children. Washington (DC): United States Department of Transportation, 2005

¹⁶ CPS Issue Report, Partners for Child Passenger Safety, State Farm Insurance Companies, and CHOP in Collaboration with the American Academy of Pediatrics, May 2005.

¹⁷ IBID

¹⁸ IBID

¹⁹ Strengthening Child Passenger Safety Laws, NHTSA, 2007.

<http://www.nhtsa.dot.gov/people/injury/TSFLaws/PDFs/810728W.pdf>

²⁰ Insurance Institute for Highway Safety, Child restraint, belt laws as of February 2006